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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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Navigation Technologies Corporation
Attention Patent Department
222 Merchandise Mart Plaza
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EXAMINER

NOLAN, DANIEL A

| ART UNIT | PAPER NUMBER |
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2655

DATE MAILED: 04/17/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,660

Applicant(s)

KHAN ET AL.

Examiner

Daniel A. Nolan

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18, 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

(Note that as of October 1, 2002 a new **Art Unit 2655** was established that includes this application, and that this new AU number should be used in all future correspondence.)

Drawings

1. The drawings are objected to because item 262 (figure 3) is labeled twice, by number and by the also-correct term, *active word list*. While not technically incorrect, combining these labels will avoid the potential error of misinterpretation.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because (in figure 3) reference character "416" has been used to designate both *compare* and *call* steps.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:
 - "710" (figure 8) is not described.
4. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure is objected to because the length exceeds 150 words. Correction is required. See MPEP § 608.01(b).

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification, such as:

- The word *re-writable* (sic) is misspelled (page 15 lines 5 & 17).

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Dynamic Building, Maintenance and Use of Spatial Word List For Automatic Speech Recognition".

Claim Objections

8. Claims 8, 12, 16 and 19-20 are objected to because of the following informalities:

- In claim 8, a word such as "is" should precede the word "selected" (line 17).
- Claim 16 should end with a period (line 28).
- In claim 20, "re-builder" should be hyphenated (line 27) as in the disclosure.
- Claims 12 and 19 lack preamble. See MPEP § 608.01(i) & 37 CFR § 1.75(e)(1).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claim 19 is rejected under 35 U.S.C. 102(a) as being anticipated by Wakisaka et al (U.S. Patent 6,112,174).

11. Regarding claim 19 as understood by the Examiner, Wakisaka et al (column 2 line 52) reads on the feature of *a positioning system that determines a current location of a vehicle;*

- Wakisaka et al (column 54-63) reads on the feature of *an automatic speech recognition system that matches data representations of words spoken by a user of the vehicle to a word list of data representations of spoken names of geographic features,*
- Wakisaka et al (AREA 1-n in figure 3b) reads on the feature that *the word list of data representations of spoken names of geographic features includes only a portion of all available data representations of spoken names of geographic features contained in a geographic database*
... because, each AREA of Wakisaka et al changes nature depending on whether they are in use or not, the remaining dictionaries of Wakisaka et al (as in

figure 3B) read on the feature that a *1st portion of the word list of data representations of spoken names of geographic features (column 6 line 28) includes data representations of spoken names of geographic features selected without regard to proximity to the current location of the vehicle;*

- When the vehicle is in the appropriate AREA, Wakisaka et al reads on the feature that *the word list of data representations of names of geographic features includes data representations of spoken names of geographic features selected based upon proximity to the current location of the vehicle.*

Allowable Subject Matter

12. Claims 1-18 and 20-21 are allowed.

13. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

14. The following is a statement of reasons for the indication of allowable subject matter:

- The present invention is directed to ***building a dictionary of places anticipating a request that might be spoken while driving, the places being selected on the basis of closeness to the vehicle.***

- The closest prior art of record Wakisaka et al operates to continually build speech dictionaries, basing replacement on recognition failure and using maps from location sets based on position rather than individual distance.
- Other close prior art of DeLorme et al, does select places within a distance of a route, but only to display location on a map or for presentation of site information.
- Claims 1, 6, 12 (as understood by the Examiner) and 20 each identify the uniquely distinct features of:

"determining whether a distance from the current position of the vehicle to a position associated with a previous build of a speech recognition word list exceeds a threshold; and

(if the distance exceeds the threshold), forming a new speech recognition word list by adding names of geographic features located in proximity to the current position of the vehicle to a plurality of words that correspond to a collection of geographic features selected without regard to proximity to the current position of the vehicle."

- While the closest prior art together could disclose a mechanism of *determining distances between a place and a vehicle and using an appropriate dictionary*, the dissimilarities between the effort of collecting elements meeting criteria for display and using prepared data for speech recognition is sufficiently great that the prior art of record would fail to anticipate or render the above underlined limitations obvious.

- Claims 2-5, 7-11, 13-18 and 21 depend on claims that have been found to be allowable and so would they themselves be allowed as a consequence.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- McDonough et al (U.S. Patent 6,092,076 & 6,163,749 A) map display and scrolling in navigation application limits speech recognition to be manual input alternative for keyboard/mouse/joystick, does not specifically construct speech recognition lists.
- Wakisaka et al (U.S. Patent 6,112,174 A) recognition dictionary system structure and changeover method of speech recognition for car navigation.
- DeLorme et al (U.S. Patent 6,321,158) integrated routing/mapping information.
- Kozak et al (U.S. Patent 6,317,685 B1) provides alternate routes for navigation system.
- Suzuki et al (Japan Patent 2001-304900) has recognition dictionaries associates with individual sets of maps.
- Toyoshima et al (Japan Patent 01-141314) carries place information in map.
- Kuwubara et al (Japan Patent 04-289415 & 04-289416) computes distances from vehicle to locations.

Art Unit: 2655

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at (703) 305-4827.

The fax phone number for Technology Center 2600 is (703) 872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE".

Formal response to this action may be faxed according to the above instructions,

or mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231


or hand-delivered to: Crystal Park 2,
2121 Crystal Drive, Arlington, VA,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan
Examiner
Art Unit 2655

DAN/d

April 15, 2003

A handwritten signature in black ink, appearing to read 'Daniel A. Nolan', with a stylized flourish at the end.

**DANIEL NOLAN
PATENT EXAMINER**